

Notice of Allowability

Application No.

09/653,060

Examiner

Andrew W Wahba

Applicant(s)

HEATH ET AL.

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/24/2004.
2. ☒ The allowed claim(s) is/are 1-7, 9-23, 26-43 and 45-51 (renumbered claims 1-47).
3. ☒ The drawings filed on 01 September 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____



**PHIRIN SAM
PRIMARY EXAMINER**

DETAILED ACTION

1. Claims 9-22 have been renumbered claims 8-21.
Claim 23 has been renumbered claim 22.
Claims 26-42 has been renumbered claims 23-39.
Claim 43 has been renumbered claim 40.
Claims 45-51 have been renumbered claims 41-47.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Proksch on 01/06/2005.

Claim 26 (renumbered claim 23), line 1: replace "claim 24" with "claim 23" (renumbered claim 22).

Allowable Subject Matter

3. Claim 1-7, 9-23, 26-43 and 45-51 (renumbered claims 1-47) are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

With regard to claim 1, the prior art does not teach or fairly suggest mode determination logic including a comparator(s) logic to compare a delay spread measure for said received signal to a delay spread threshold and a selector(s) to select spatial

multiplexing for transmission of said subscriber datastream if said delay spread measure is below said delay spread threshold.

With regard to claim 23 (renumbered claim 22), the prior art does not teach or fairly suggest measuring a transmission characteristic of said received signal transmission, comparing said measured transmission characteristic to a transmission characteristic threshold and selecting one of spatial multiplexing and non-spatial multiplexing in response to said comparison of said measured transmission characteristic to said transmission characteristic threshold.

With regard to claim 43 (renumbered claim 40), the prior art does not teach or fairly suggest a control channel for communicating if a subscriber datastream should be transmitted between said base transceiver station and said subscriber unit utilizing spatial multiplexing or non-spatial multiplexing wherein said control channel is used to indicate the spatial multiplexing or non-spatial multiplexing capability of one of said base transceiver station and said subscriber unit.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew W Wahba whose telephone number is (571) 272-3081. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth N Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully Submitted,

Andrew Wahba *AW*
Patent Examiner
January 6, 2004



**PHIRIN SAM
PRIMARY EXAMINER**